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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,450

12/20/2005

Masayoshi Handa

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6369

2292 7590 02/17/2009  
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EXAMINER

BUIE, NICOLE M

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

02/17/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,450	<b>Applicant(s)</b> HANDA ET AL.	
	<b>Examiner</b> NICOLE M. BUIE	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060320 / 20080331</u> .                                     | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on 12/04/2008 has been entered. Claims 1-9 remain pending in the application, and claims 10-12 have been added.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-7 and 10-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Obayashi et al. (US 4,863,989) in view of Hosokawa et al. (US 2001/0053826).

**Regarding claims 1, 3, 5-7, and 11** Obayashi et al. discloses a water-absorbent resin composition (Abstract, C1/L5-12) comprising a water-absorbent resin (C2/L47-57), an oxygen-containing reducing inorganic salt (i.e. sulfites, bisulfites, pyrosulfites, dithionites, and nitrites)

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(C2/L63-C3/L18), and an organic antioxidant (i.e. ascorbic acids, gallic acids, and benzimidazoles) (C3/L42-68).

However, Obayashi et al. does not disclose an aminocarboxylic acid-based metal chelating agent. Hosokawa et al. teaches aminocarboxylic acid compounds (i.e. ethylenediaminetetracetic acid, hydroxyethylenediaminetriacetic acid, diethylenetriaminepentaacetic acid, triethylenetetraminhexaacetic acid, and salts thereof) [0071]. (The chelating agent of Hosokawa et al. is able to chelate with zinc salts as evidenced by Hosokawa [0052]) in a water-absorbent composition.) Hosokawa et al. further teaches the amount of aminocarboxylic acid-based metal chelating agent is 0.01 to 5 parts by weight per 100 parts by weight of a water-absorbent resin[0081]. Obayashi et al. and Hosokawa et al. are analogous art concerned with the same field of endeavor, namely water-absorbent resin compositions. It would have been obvious to one of ordinary skill in the art at the time of invention to use an aminocarboxylic acid-based compound of Hosokawa et al. in a composition of Obayashi et al., and the motivation to do so would have been as Hosokawa et al. suggests improving gel stability of a water-absorbent resin composition [0082].

**Regarding claim 2**, Obayashi et al. discloses a water-absorbent resin composition wherein the amount of the oxygen-containing reducing inorganic salt is 0.01 to 5 parts by weight based on 100 parts by weight of the water-absorbent resin (C3/L19-31).

**Regarding claim 4**, Obayashi et al. discloses a water-absorbent resin composition wherein the amount of the organic antioxidant is 0.001 to 5 parts by weight based on 100 parts by weight of the water-absorbent resin (C4/L1-4).

**Regarding claim 10**, the Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. discoloration resistance would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

**Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Obayashi et al. (US 4,863,989) in view of Hosokawa et al. (US 2001/0053826) as applied to claim 1 above, further in view of Wada et al. (US 5,760,080) as evidenced by Torii et al. (US 2003/0069359 A1).

**Regarding claim 8**, modified Obayashi et al. discloses a water-absorbent resin composition as shown above in claim 1. Obayashi et al. further discloses an absorbent (C4/L29-32).

However, Obayashi et al. does not disclose a hydrophilic fiber. Wada et al. teaches hydrophilic fibers for an absorbent (C5/L11-16). Modified Obayashi et al. and Wada et al. are analogous art concerned with the same field of endeavor, namely water-absorbent compositions. It would have been obvious to one of ordinary skill in the art at the time of invention to use hydrophilic fibers of Wada et al. in a composition of modified Obayashi et al., and the motivation to do so would have been as Torii et al. suggests absorbing water in a short time of an

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absorbent, retaining swollen water-absorbent resins after water is absorbed, or sufficiently spreading water to the water-absorbent resins that are distributed according to capillary action, retaining powdery absorbent-resins [0005].

**Regarding claim 9**, Obayashi et al. discloses an absorbent article (C4/L29-32).

However, modified Obayashi et al. does not disclose an absorbent article interposed between a liquid-permeable sheet and a liquid-impermeable sheet. Wada et al. teaches an absorbent article interposed between a liquid-permeable sheet and a liquid-impermeable sheet (C18/L11-25). Modified Obayashi et al. and Wada et al. are analogous art concerned with the same field of endeavor, namely water-absorbent resin compositions. It would have been obvious to one of ordinary skill in the art at the time of invention to interpose between a liquid-permeable sheet and a liquid-impermeable sheet of Wada et al. in an article of modified Obayashi et al., and the motivation to do so would have been as Wada et al. suggests to achieve excellent water absorbing properties (C18/L11-25).

**Regarding claim 10**, the Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. discoloration resistance would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

**Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Obayashi et al. (US 4,863,989) in view of Hosokawa et al. (US 2001/0053826).

**Regarding claims 1, 3, 5-7, and 11** Obayashi et al. discloses a water-absorbent resin composition (Abstract, C1/L5-12) comprising a water-absorbent resin (C2/L47-57), an oxygen-containing reducing inorganic salt (i.e. sulfites, bisulfites, pyrosulfites, dithionites, and nitrites) (C2/L63-C3/L18), and an organic antioxidant (i.e. ascorbic acids, gallic acids, and benzimidazoles) (C3/L42-68). Obayashi et al. discloses a water-absorbent resin composition wherein the amount of the oxygen-containing reducing inorganic salt is 0.01 to 5 parts by weight based on 100 parts by weight of the water-absorbent resin (C3/L19-31). Furthermore, Obayashi et al. discloses a water-absorbent resin composition wherein the amount of the organic antioxidant is 0.001 to 5 parts by weight based on 100 parts by weight of the water-absorbent resin (C4/L1-4).

However, Obayashi et al. does not disclose an aminocarboxylic acid-based metal chelating agent. Hosokawa et al. teaches aminocarboxylic acid compounds (i.e. ethylenediaminetetracetic acid, hydroxyethylenediaminetriacetic acid, diethylenetriaminepentaacetic acid, triethylenetetraminehexaacetic acid, and salts thereof) [0071]. (The chelating agent of Hosokawa et al. is able to chelate with zinc salts as evidenced by Hosokawa [0052]) in a water-absorbent composition.) Hosokawa et al. further teaches the amount of aminocarboxylic acid-based metal chelating agent is 0.01 to 5 parts by weight per 100 parts by weight of a water-absorbent resin[0081]. Obayashi et al. and Hosokawa et al. are analogous art concerned with the same field of endeavor, namely water-absorbent resin compositions. It would have been obvious to one of ordinary skill in the art at the time of

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invention to use an aminocarboxylic acid-based compound of Hosokawa et al. in a composition of Obayashi et al., and the motivation to do so would have been as Hosokawa et al. suggests improving gel stability of a water-absorbent resin composition [0082].

### ***Terminal Disclaimer***

The terminal disclaimer filed on 12/04/2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application 10/552,152 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Response to Arguments***

Applicant's arguments have been fully considered but they are not persuasive. The following comments apply:

A) Applicant's argument that the unexpected results of a water-absorbent composition exhibiting sufficient discoloration resistance is achieved in the presence of a metal chelating agent (P9) is not persuasive. "It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant." *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972) (discussed below); *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991) (discussed below). Although *Ex parte Revenged*, 28 USPQ2d 1300, 1302 (Bd. Pat. App. & Inter. 1993) states that obviousness cannot be established by combining references "without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done" (emphasis added), reading the quotation in context it is clear that while there must be motivation to make



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the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention. See MPEP § 2144. It would have been obvious to one of ordinary skill in the art at the time of invention to use an aminocarboxylic acid-based compound of Hosokawa et al. in a composition of Obayashi et al., and the motivation to do so would have been as Hosokawa et al. suggests improving gel stability of a water-absorbent resin composition [0082]. Additionally, Miyake et al. (US 2001/0053807) teaches a water-absorbent resin composition which contains comparable amount of aminoacetic chelating agent as taught by Obayashi et al. in view of Hosokawa et al. has excellent light resistance [0010] and, thus, the additional benefit of discoloration resistance imparted by the metal chelator does not go unrecognized in the prior art.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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*Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE M. BUIE whose telephone number is (571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. M. B./  
Examiner, Art Unit 1796  
2/10/2009

/Marc S. Zimmer/

Primary Examiner, Art Unit 1796